



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,970	10/19/2005	Claudiu Vasilescu	1200.741	8186
7590 02/22/2008 Berenato White & Stavish 6550 Rock Spring Drive, Suite 240 Bethesda, MD 20817				
EXAMINER NGUYEN, HANH N				
ART UNIT 2834		PAPER NUMBER		
MAIL DATE 02/22/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/553,970

**Applicant(s)**

VASILESCU ET AL.

**Examiner**

HANH N. NGUYEN

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) 16 and 17 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-15 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 19 October 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of claims 1-15 in the reply filed on 1/7/2008 is acknowledged.

***Drawings***

2. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "the radial plate portion of each of the two superimposed fans has holes or thinned portions in at least one common zone" in claim 9, the "the radial plate portion of each of the two superimposed fans includes holes or thinned portions in different zones" in claim 10, the "a balancing hole of the rotor is in line with a blade of the pre-balanced fan" in claim 12 and "the central bore of the fan is de-centred so as to bring the axis of rotation of the machine into coincidence with the centre of gravity of the fan" in claim 13 must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.

Art Unit: 2834

(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.

(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The abstract of the disclosure is objected to because "[Figure 4]" in the abstract should be deleted. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4 and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Hayashi et al (US 5,763,968).

Regarding claim 1, AAPA disclose a rotary electrical machine comprising a stator (5) and a rotor (4), the rotor (4) including zones (26) which are adapted for balancing operations thereon, together with at least one fan (7, 9) which is adapted to

be mounted on the rotor and which includes a radial plate portion (3) and fan blades (Figs. 1, 2 and pages 2-4 of the specification of the present invention). AAPA fails to show the fan fixed to the rotor is pre-balanced.

However, Hayashi et al. disclose a rotary electrical machine wherein the fan (6 in Fig. 1) fixed to the rotor is pre-balanced (Col. 4, lines 12-14) for the purpose of reducing noise (Col. 1, lines 38-50).

Since AAPA and Hayashi et al. are in the same field of endeavor, the purpose disclosed by Hayashi et al. would have been recognized in the pertinent art of AAPA.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify AAPA by using pre-balanced fan fixed to the rotor as taught by Hayashi et al. for the purpose of reducing noise.

Regarding claim 2, AAPA disclose a rotary electrical machine characterised in that the radial plate portion of the fan has a non-constant thickness (the thickness is increased at the web area near reference sign 21 in Fig. 2).

Regarding claim 3, AAPA disclose a rotary electrical machine characterised in that the radial plate portion of the fan includes portions of material of increased thickness.

Regarding claim 4, Hayashi et al. disclose a rotary electrical machine characterised in that the radial plate portion (63 in Fig. 1) of the fan includes holes (65).

Regarding claim 7, AAPA disclose a rotary electrical machine characterised in that the fan is a fan consisting of two superimposed fans (Fig. 2 of the present invention).

Regarding claim 8, Hayashi et al. disclose a rotary electrical machine characterised in that the fan has material (hatched portion X as shown in Fig. 5) removed, with a view to balancing it.

Regarding claims 9 and 10, it would have been obvious to one ordinary skill in the art at the time the invention was made to arrange two superimposed fans so that the radial plate portion of each of the two superimposed fans has holes or thinned portions in at least one common zone or in different zones since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 11, Hayashi et al. disclose a rotary electrical machine characterised in that the rotor is pre-balanced.

Regarding claim 12, it would have been obvious to one ordinary skill in the art at the time the invention was made to put the balancing hole of the rotor in line with a blade of the pre-balanced fan, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 13, AAPA disclose a rotary electrical machine characterised in that the central bore (Fig. 2) of the fan is de-centred so as to bring the axis of rotation of the machine into coincidence with the centre of gravity of the fan.

Regarding claim 14, Hayashi et al. disclose a rotary electrical machine characterised in that the fan is fixed eccentrically on the rotor (Fig. 1) in order to bring the axis of rotation of the machine into coincidence with the centre of gravity of the fan.

Regarding claim 15, Hayashi et al. disclose a rotary electrical machine characterised in that the rotor is a claw-type rotor (Fig. 2).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Hayashi et al (US 5,763,968) and further in view of Keyes (US 5,947,686).

Regarding claim 5, AAPA and Hayashi et al. disclose the invention except for showing a rotary electrical machine characterised in that at least one blade includes additions of material for the purpose of balancing the fan.

However, Keyes discloses a rotary electrical machine characterised in that at least one blade includes additions of material (Fig. 3 and Col. 4, lines 1-13) for the purpose of balancing the fan.

Since AAPA, Hayashi et al. and Keyes are in the same field of endeavor, the purpose disclosed by Keyes would have been recognized in the pertinent art of AAPA and Hayashi et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify AAPA and Hayashi et al. by adding material to at least one blade as taught by Keyes for the purpose of balancing the fan.



7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Hayashi et al (US 5,763,968) and further in view of Shyu (US 5,193,983).

Regarding claim 6, AAPA and Hayashi et al. disclose the invention except for showing a rotary electrical machine characterised in that at least one blade has a chamfer for the purpose of balancing the fan.

However, Shyu discloses a rotary electrical machine characterised in that at least one blade includes at least one blade having fins to be trimmed to remove some materials for the purpose of balancing the fan (Col. 4, lines 5-12).

Since AAPA, Hayashi et al. and Shyu are in the same field of endeavor, the purpose disclosed by Shyu would have been recognized in the pertinent art of AAPA and Hayashi et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify AAPA and Hayashi et al. by trimming or chamfering at least one blade to remove some materials as taught by Shyu for the purpose of balancing the fan.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone

Art Unit: 2834

numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1000.

HNN

February 17, 2008

/Nguyen N Hanh/

Examiner, Art Unit 2834